

REMARKS

Claims 1-23 are pending in the application. These claims were rejected as follows:

Claims / Section	35 U.S.C. Sec.	References / Notes
1-5, 8-11 & 13	§102(e) Anticipation	<ul style="list-style-type: none">• Leedom (U.S. Patent No. 6,389,143).
6, 7, 12 & 14-23	§103(a) Obviousness	<ul style="list-style-type: none">• Leedom (U.S. Patent No. 6,389,143); and• Liu (U.S. Patent Publication No. 2003/0186099).

5 Applicant has amended claim 17 to correct a typographical error, and claim 1 to more distinctly claim the invention. Applicant has also provided discussion for distinguishing the present invention, with claims as amended, from the art cited against it.

 Applicant's use of reference characters below is for illustrative purposes
10 only and is not intended to be limiting in nature unless explicitly indicated.

35 U.S.C. §102(e), CLAIMS 1-5, 8-11 & 13 ANTICIPATION BY LEEDOM

 1. *Claim 1 has been amended to include a limitation that the ventilation mechanism is configured to repeatedly enable or prevent the ventilation of the voltage source.*

15 In the OA, on p. 2, the Examiner rejected claim 1 over the Leedom reference as teaching the elements of claim 1, notably the ventilation mechanism 315, as illustrated in Figures 3-4, that is configured to enable or prevent the ventilation of the voltage source.

Accordingly, Applicant has amended independent claim 1 to include a limitation that the ventilation mechanism according to the present invention is configured to repeatedly enable or prevent the ventilation of the voltage source without disassembling the battery housing or battery bay.

5 The invention concerns a hearing device with a voltage source as well as with ventilation openings for ventilation of the voltage source. The zinc-air batteries frequently used in hearing devices require the supply of air for voltage buildup. Therefore ventilation openings for ventilation are provided in both the housings of the batteries and in the hearing devices. Zinc-air batteries generally
10 have a high self-discharge. In new, unused batteries, the ventilation openings are therefore sealed (for example, with an adhesive tape) to prevent the self-discharge. This must first be removed before the use of the battery.

Hearing device users frequently do not use hearing devices permanently, but rather use them occasionally. It is thereby annoying that the inserted zinc-air
15 battery discharges within a few days even in an unused, deactivated hearing device. The invention therefore provides a mechanism on the hearing device via which the ventilation openings can be sealed, whereby the air supply to the battery is interrupted and with which a self-discharge of the battery in an unused hearing device is largely prevented.

20 Leedom describes a hearing device in which a zinc-air battery is already inserted upon assembly, thus before the sale of the hearing device. So that the battery is not discharged for a long storage of the hearing device, an adhesive

tape is provided that both interrupts battery contact and seals the ventilation openings in the hearing device.

After the assembly of the hearing device, one end of the adhesive tape sticks out laterally somewhat from the housing of the hearing device so that this
5 can be gripped with the fingers and pulled out before the first startup of the hearing device (compare column 7, lines 28 through 60). The described design with a thin, adhesive and slightly elastic, deformable adhesive tape is such that it is impossible to insert the adhesive tape back into the housing after it has been pulled out. From this it is clear that the adhesive tape only prevents the
10 ventilation before the first startup of the hearing device, and does not permit a repeated enabling or prevention of ventilation of the voltage source. The function of the adhesive tape is therefore comparable with that of an adhesive tape on a new battery.

In contrast to the prior art, in the invention, with claim 1 as amended, the
15 mechanism for opening and sealing the ventilation openings are executed so that these can be used repeatedly. It is thereby possible to prevent the self-discharge of the battery not only during the storage time before the first use, but rather also after each deactivation of a temporarily unused hearing device. A hearing aid according to amended claim 1 does not require that the housing of
20 the hearing aid device or, respectively, the battery bay be disassembled in order to prevent ventilation.

For these reasons, the Applicant asserts that the amended claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw the §102 rejection from the present application.

35 U.S.C. §103(a), CLAIMS 6, 7, 12 & 14-23 OBVIOUSNESS OVER LEEDOM IN VIEW OF LIU

2. It would not be obvious to utilize the automated actuators for opening and closing the air vents of Liu in the hearing aid design of either Leedom or the present invention.

In the OA, on pp. 4-7, the Examiner added the Liu reference as teaching various structural aspects for the ventilation mechanism with respect to certain dependent claims.

However, the Applicant asserts that it would not be obvious to combine the teachings of an actuator-based ventilation system according to Liu with a hearing aid as described in Leedom or as claimed in the present application. Liu describes the applicability of the invention in devices such as mobile phones, laptop computers and palm computers (abstract). Disadvantageously, the actuator-based vents of Liu draw additional power and add weight to the devices that are not practical to implement in a hearing aid. A hearing aid creates unique structural requirements that could not be met with the device of Liu. Therefore, when one skilled in the art is seeking to solve the problem of the present invention, they would not turn to the actuator-based solution of Liu to resolve the problem, as such a solution would be impractical and unworkable. It would not be obvious to combine the teaching of Liu with those of Leedom to arrive at the present inventive solution, with claim 1 as amended.

For these reasons, the Applicant asserts that the amended claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw the §103(a) rejection from the present application.

CONCLUSION

5 Inasmuch as each of the objections have been overcome by the amendments, and all of the Examiner's suggestions and requirements have been satisfied, it is respectfully requested that the present application be reconsidered, the rejections be withdrawn and that a timely Notice of Allowance be issued in this case.

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Respectfully submitted,

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